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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,010	07/11/2001	Shingo Kataoka	0941.65687	9056

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EXAMINER
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SEFER, AHMED N

ART UNIT	PAPER NUMBER
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2826

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/903,010

Applicant(s)

KATAOKA ET AL.

Examiner

A. Sefer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-38, 73 and 74 is/are pending in the application.
- 4a) Of the above claim(s) 26, 32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24, 25, 27-31, 34, 36, 37 and 74 is/are rejected.
- 7) ☒ Claim(s) 35, 38 and 73 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Species of Figures 16-35C (claims 24-38, 73 and 74) is acknowledged. Claims 1-23 and 44-72 have been cancelled and since the Species of Figures 16-35C do not read on claims 26, 32 and 33, claims 26, 32 and 33 have been withdrawn from consideration.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 34 recites the limitation "said first region ..." and "said second region ...". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 24, 25, 27-31, 34, 36, 37 and 74 are rejected under 35 U.S.C. 102(e) as being anticipated by Takeda et al. US PG-Pub 2003/0202146.

Takeda et al disclose in (see figs. 17, 25-32 and 48-54 and pars. 0347, 0355 and 0356) liquid crystal display device comprising: a first substrate 311; a second substrate 311 facing said first substrate; a liquid crystal 329 layer sealed between said first substrate and said second substrate; a first electrode 318 formed on said first substrate; a second electrode 334 formed said second substrate; a first molecule orientation film 320 formed on said first substrate so as to cover said first electrode; a second molecule orientation 335 film formed on said second substrate so as to cover said second electrode; a first polarizing plate arranged outside of said first substrate; and a second polarizing plate arranged outside of said second substrate in a crossed Nicol state (pars. 0335 and 0352) to said first polarizing plate, wherein: in a non-driving state in which a driving voltage is not applied between said first electrode and said second electrode, liquid crystal molecules are oriented in a vertical direction to said first substrate and said second substrate by said first molecule orientation film and said second molecule orientation film, respectively; on said first electrode, electrode patterns 319, which extend in a first direction parallel to a surface of said liquid crystal layer, are periodically repeated to be arranged at intervals of a first width in a second direction, which said second direction is parallel to the surface of said liquid crystal layer and is vertical to said first direction; said electrode patterns, which are repeated to be arranged in said second direction, are mutually connected each other by connectors (par. 0236); on said first electrode, a cutout pattern 31/34/36 extending in said second direction is formed at substantially a greater second width

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than said first width (par. 0373); and said liquid crystal molecules substantially tilt in said first direction in said driving state.

As for claim 25, Takeda et al disclose (see figs. 25, 27 and 29) each of said electrode patterns 33 is spaced from another electrode pattern adjacent and corresponding thereto in said first direction, by said cutout pattern 31/34/36.

As for claim 27, Takeda et al disclose in fig. 31 at least a part of said electrode patterns further mutually connects along an edge of an opening part of a pixel electrode.

As for claim 28, Takeda et al disclose in fig. 25 each of said electrode patterns has a tapered shape in said first direction.

As for claim 29, Takeda et al disclose each of said electrode patterns has a shape which width becomes narrower toward a top edge in a step-wise shape.

As for claim 30, Takeda et al disclose in figs. 25 and 55 third electrode patterns are formed so as to extend along said cutout patterns at a same electric potential as said second electrode under said first electrode.

As for claim 31, Takeda et al disclose in fig. 25 on said first electrode, a first region and a second region are formed so that said first direction in said first region vertically crosses said first direction in said second region; and said third electrode extends along said first region and the second region on said first substrate.

As for claim 34, as understood, Takeda et al disclose in figs. 25 and 27 a first electrode comprising said first region where said electrode patterns are repeated and said second region which covered with a uniform conducting film.

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As for claims 36 and 37, the specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

As for claim 74, Takeda et al disclose in. figs. 33 and 34 a thin film transistor formed so as to correspond to each pixel electrodes and drives each of said pixel electrodes.

*Allowable Subject Matter*

6. Claims 35, 38 and 73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**NATHAN J. FLYNN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601.

ANS  
February 3, 2004